

Invitation to Comment:

Chaco Culture NHP

Tamarix and *Cardaria* Exotic Management Environmental Assessment

Chaco Culture National Historical Park (CCNHP) is located in northwest New Mexico, approximately 60 miles south of the city of Farmington. The park contains thousands of archaeological sites, material evidence of a culture that thrived in Chaco Canyon during the period from circa A.D. 800 to 1200. Chaco Culture NHP (CHCU) contains approximately 34,000 acres located in San Juan and McKinley Counties.

Tamarisk (*Tamarix chinensis*) and globe- pod hoary cress (*Cardaria pubescens*) are exotic (non native) species that rapidly and aggressively invade riparian areas and seeps. These invading species are displacing native species, reducing biodiversity, adversely modifying the native ecological integrity, and disrupting the hydrology of the park. The proposed management action must achieve natural resource management objectives while avoiding undue adverse impacts to other resources. The proposed action consists of implementing control measures to eradicate and/or reduce exotic (non- native) plant infestations of tamarisk and globe- pod hoary cress within Kin Bineola Wash, Kin Klizhin Wash, along avenues of infestation, and at a series seeps and springs located within the main park unit.

The purpose of the *Tamarix* and *Cardaria* Exotic Management Environmental Assessment (EA) is to examine the impacts associated with implementing the proposed exotic species control action. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council on Environmental Quality (CEQ) (40 CFR 1500- 1508), and the National Park Service (NPS) Director's Order No. 12 (DO- 12, NPS, 2001b)) (*Conservation Planning, Environmental Impact Analysis, and Decision- Making*), NPS- 28 (Cultural Resource Management Guideline), NPS- 77 (Natural Resources Management Guideline), and NPS Management Policies (2001a).

Two measures that would provide varying degrees of control and removal of *Tamarix* and *Cardaria* have been analyzed in the preparation of this EA. These are:

1) No Action Alternative. Under the No Action alternative, no *Tamarix* or *Cardaria* control would be attempted. The present trend of increasing numbers, ages, and distribution of nonnative *Tamarix* will continue. This trend has been well- documented in riparian areas throughout the southwest. This alternative would not allow for the preservation of high- quality, desert riparian ecosystems found within the park.

2) Preferred Alternative: Using a combination of cutting and herbicide application, the NPS Preferred Alternative will remove and control the exotics *Cardaria* and *Tamarix* from the riparian areas of the Kin Bineola detached unit (179 acres), near Kin Klizhin (114 acres), and at isolated and individual stand locations in the Chaco Canyon side canyons including Gambler's Spring, Mockingbird Canyon Spring, and Wijiji Spring, and along the general access roads of the park (called "Avenues of Infestation") (10 acres). In addition, the Preferred Alternative will assess eradication efficacy of the project over a five- year period. The Preferred Alternative is also the environmentally preferred alternative.

This Environmental Assessment has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision- making framework that

- 1) analyzes a reasonable range of alternatives to meet the objectives of the proposal,
- 2) evaluates potential issues and impacts to Chaco Culture National Historical Park resources and values, and
- 3) identifies mitigation measures to lessen the degree of these impacts.

Resource topics that have been addressed in this EA include soils, water quality and quantity, jurisdictional wetlands, vegetation and wildlife (non T&E), visitor experience/natural soundscapes, and cultural resources. Topics dismissed from consideration due to negligible impact include air quality, threatened, endangered (T&E), and sensitive species, prime and unique farmlands, environmental justice, regional economy, concessions, lightscape management, and visitor safety.

Public Comment

If you wish to comment on this Environmental Assessment, you may mail comments to the name and address below. This Environmental Assessment will be available online under management documents at www.nps.gov/chcu for public review for a period of 30 days. Please note that names and addresses of people who comment become part of the public record. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations, businesses and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

Please send any comments on this Environmental Assessment to:

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Or

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E- mail Subject line: "Tamarix and Cardaria Exotic Management EA"